Department of Health

Health Advisory 05/11/05 Avian Influenza (H5N1)

CBEP
Center for Biodefense and Emerging Pathogens

Highly pathogenic H5N1 avian influenza is spreading across SE Asia in birds. As of 05/04/2005, 89 cases of avian to human infection with a mortality rate greater than 50% have been reported. CDC recommends enhanced surveillance to identify patients at increased risk as noted below. **Anyone presenting to the emergency department or a clinic with a febrile respiratory illness must be asked about a history of travel within the last 10 days.** Avian influenza has also presented as a gastrointestinal (non-respiratory), febrile illness. Thus, a travel history should be obtained in these situations as well. Many patients with H5N1 avian influenza have leukopenia and thrombocytopenia and/or elevated transaminases.

Testing for avian influenza (H5N1) is indicated for hospitalized patients with:

a. **Radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternate diagnosis has not been established, AND**
b. **History of travel within 10 days of symptom onset to a country with documented H5N1 avian influenza in poultry and/or humans .**

For an updated listing of H5N1-affected countries see www.oie.int/eng/en_index.htm and www.who.int/csr/disease/avian_influenza/en/.

Testing for avian influenza (H5N1) should be considered on a case-by-case basis in consultation with the RI DOH for hospitalized or ambulatory patients with: Documented temperature of >38°C (> 100.4°F), AND

a. **One or more of the following: cough, sore throat, shortness of breath, or diarrheal illness, AND**
b **History of contact with poultry (e.g., visited a poultry farm, a household raising poultry, or a bird market) or a known or suspected human case of influenza A (H5N1) in an H5N1-affected country within 10 days of symptom onset**.

Laboratory Testing: Rapid influenza antigen tests on appropriately obtained specimens (eg nasopharyngeal swabs) are reasonably sensitive but not specific for diagnosing avian influenza. Thus, avian influenza can only be diagnosed by culture or PCR. For PCR testing of suspected avian influenza cases, contact your infection control office and the RI DOH at 401-222-2577/272 5952 after hours. The DOH Laboratory will forward to CDC for culture all non-H1 or H2 influenza A PCR-positive specimens. Culture requests for non-H1 or H2 influenza A at the CDC should come from the RI DOH. H5N1 avian influenza must be worked with under Biosafety Level (BSL) 3+ lab conditions.

Infection Control: In emergency departments and outpatient settings, visual alerts to practice respiratory hygiene/cough etiquette and hand hygiene should be available for patients and families. Patients with febrile respiratory illness should be separated by > 3 feet from those without such symptoms and be given a procedure mask (with ear loops) or surgical (mask with ties) if available. Hospitalized patients with suspected avian influenza should be placed in droplet and contact precautions. Consider airborne precautions if available. Cough-inducing procedures (e.g. bronchoscopy) should be performed only if absolutely necessary and carried out with only essential personnel present wearing N-95 respirators and eye protection. Healthcare workers should be vaccinated against human influenza to reduce the likelihood of being co-infected with human and avian influenza. CDC recommendations and infection control resources can be found at http://www.cdc.gov/flu/avian/professional/infect-control.htm.

Reporting Cases: Suspect cases of avian influenza must be promptly reported to the RI DOH by phone. Call 222 2577, after hours call 272 5952.

For clinical information about human H5N1 avian influenza cases, see:

1. Cases of influenza A (H5N1) – Thailand, 2004. MMWR 2004;53:100-103 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5305a2.htm.
2. Hien TT, et al. Avian influenza A (H5N1) in 10 patients in Vietnam. NEJM 2004;350:1179-88.
3. de Jong, et al. Fatal avian influenza A (H5N1) in a child presenting with diarrhea followed by coma. NEJM 2005;352:686-91.

For more information about avian influenza, go to www.cdc.gov/flu/avian/

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